We claim:

1. A surface-modified nanoparticulate metal oxide, where the metal is chosen ~~form~~ from the group consisting of aluminum, cerium, iron, titanium, zinc and zirconium, wherein the surface modification comprises a coating with polyasparaginic acid.

2. The surface-modified metal oxide according to claim 1, wherein the metal oxide particles have an average primary particle diameter of from 5 to 10 000 nm.

3. The surface-modified metal oxide according to one of claims 1 and 2, wherein the surface is modified with polyasparaginic acid with a molecular weight M_w of from 1000 to 100 000.

4. The metal oxide according to one of claims 1 to 3, wherein it is surface-modified zinc oxide.

5. A method of producing a surface-modified nanoparticulate metal oxide, where the metal is chosen from the group consisting of aluminum, cerium, iron, titanium, zinc and zirconium, by

   a. precipitation of the metal oxide from an aqueous solution of one of its metal salts,

   b. separating off the precipitated metal oxide from the aqueous reaction mixture and

   c. subsequent drying of the metal oxide,

   wherein the precipitation of the metal oxide in process step a. takes place in the presence of polyasparaginic acid.

6. The method according to claim 5, wherein the metal salts are metal halides, acetates, sulfates or nitrates.

7. The method according to one of claims 5 and 6, wherein the precipitation takes place in the presence of polyasparaginic acid with a molecular weight M_w of from 1000 to ~~100 000.~~

8. The method according to one of claims 5 to 7, wherein the precipitation takes place at a temperature in the range from 20°C to 100°C.

9. The method according to one of claims 5 to 8, wherein the precipitation takes place at a pH in the range from 3 to 12.

10. The method according to one of claims 5 to 9 for producing surface-modified nanoparticulate zinc oxide.

11. The method according to claim 10, wherein the precipitation of the zinc oxide in process step a. takes place from an aqueous solution of zinc(II) chloride or zinc(II) nitrate at a temperature in the range from 25 to 40°C and a pH in the range from 7 to 11 in the presence of polyasparaginic acid with a molecular weight M_w of from 1000 to 7000.

12. The use of surface-modified nanoparticulate metal oxides defined according to one of claims 1 to 4 for producing cosmetic preparations.

13. The use according to claim 12 for producing cosmetic sunscreen preparations.

14. A cosmetic preparation comprising surface-modified nanoparticulate metal oxides defined according to one of claims 1 to 4.